

### THOMAS G. NEWMAN,

Nov. 9, 1889. Vol. XXV. No. 45.

### EDITORIAL BUZZINGS.

The golden-rod, the golden-rod,
The flower above all others
To wave its plumes from sea to sea,
O'er English-speaking brothers.

This is my vote for the national flower. EUGENE SECOR.

#### Doolittle on Queen-Rearing.

Queens can be reared in the upper stories of hives used for extracted honey, where a queen-excluding honey-board is used, which are as good, if not superior, to Queens reared by any other process; and that, too, while the old Queen is doing duty below, just the same as though Queens were not being reared above. This is a fact, though it is not generally known.

By employing these methods, colonies are never queenless, and no queenless bees need be bothered with, by uniting them with other colonies, or otherwise.

If you desire to know how this can be done-how to have Queens fertilized in upper stories, while the old Queen is laying below-how you may safely introduce any Queen, at any time of the year when bees cay fly-all about the different races of bees-all about shipping Queens, queencages, candy for queen-cages, etc.-all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact everything about the queen-business which you may want to know, send for "Doolittle's Scientific Queen-Rearing;" a book of 180 pages, which is nicely bound in cloth, and as interesting as any story. Price,

An edition in strong paper covers is issued for premiums. It will be mailed as a present to any one who will send us two new subscribers to either of our Journals.

#### Crooked Statistics.

Prof. A. J. Cook gives an experience, in Gleanings, showing the carelessness with which many statistics are gathered.

A report from the Department of Agriculture stated that the chinch-bug had done serious damage in five counties in Michigan. Prof. Cook did not believe this, as in all his collecting he had never taken a chinch-bug in the State. So he wrote to the Department and learned the names of the reporters, and immediately addressed a letter to each, as follows:

Do you know the chinch-bug? Do you personally know that it has ever worked in your county? Why did you report ravages from this insect in your county to the Department of Agriculture?

Answers were received from three persons only. They reported that they did not know the insect, that they had no personal knowledge on the subject, and did not know that they had so reported. What are statistics worth if we are to have such reports.-Rural New Yorker.

#### International Bee-Association.

Mr. R. Holtermann, the efficient Secretary, has sent us the following concerning the coming convention:

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The programme for the American International Bee-Association, which is to meet at Brantford, Ontario, Canada, Dec. 4 to 6, next, is not yet complete. However from the following it will be seen that every effort has been made to have a good one. The first session will be at 2 p.m. of the 4th. Bee-Keeping an Occupation for Women—Miss H. F. Buller, Campbellford, Ont. Cellar vs. Out-Door Wintering—R. McKnight, Owen Sound, Ont. Shipping Queens—F. H. Macpherson, Beeton, Ont.

Disposal of the Honey Crop—Thomas G. Newman, Chicago, Ills.

Newman, Chicago, Ills.
Cellar Wintering—S. T. Pettit, Belmont,

Riding Hobby-Horses—Bee-keeping a rec reation from other pursuits, and an anti-dote for disease—E. R. Root, Medina, O. Alimentary System or Apparatus of the oney-Bee-Prof. A. J. Cook, Agricultural

Honey-Bee—Prof. A. J. Cook, Agriculture College, Mich. S. Corneil, Lindsay, Ont.—Subject not

given. The President will give his annual address which, doubtless, will be amusing and instructive.

Reduced rates, at least one and one-third fare for return trip, may be secured on the Grand Trunk and Canadian Pacific railway; the latter tickets must be purchased to and from Galt or Woodstock. For further particulars, apply to the Secretary.

Remember you must have a certificate when purchasing your ticket for Brantford on the Grand Trunk railway, or Galt or Woodstock on the Canadian Pacific rail-

Reduced hotel rates (\$1.50) may be secured at the Kirby House. The Commercial Hotel also, close to the place of meeting, is a good one-dollar house.

The "International" Convention has a strong claim upon every apiarist, and the attendance will be very large, no doubt. The Secretary is doing all he can to make ample arrangements for the meeting, and we hope that it will prove to be one of the most profitable Conventions ever held.

#### Is Bee-Culture on the Increase?

Mrs. L. Harrison gives her conclusions on the above question in the Prairie Farmer of last week, in these words:

This is evident from the number of new This is evident from the number of new faces seen at the convention, and also in the presence of many ladies who appeared to take an interest in the discussions. Father Langstroth, though absent, was not forgotten, as was evident from the many expressions of love and affection for him; as also of appreciation of the great value of his invention, the movable frame.

#### Drone and Queen Traps.

On page 651, Mr. J. N. Edsall, Unadilla, Nebr., makes this statement and asks:

I placed an Alley drone and queen trap on a hive this season, but the swarm left me. Why? When I opened the hive I found three young queens on the combs, and half a dozen queen-cells unhatched. I got no honey from that outfit.

We referred the matter to Mr. Alley, who

The trouble was, without doubt, an imperfection in the metal. In some of our traps the metal was cut just a little too traps the metal was cut just a little too short, and the queen, in some cases, managed to get out. This I know to be a fact, as I had a queen which made her escape in that way, and the bees left for unknown parts right before my eyes. I now make the traps so that such a thing cannot happen. The metal now runs in a saw-kerf at pen. The metal now runs in a saw-kerf at each end of the trap, and it is impossible for a queen to escape. Mr. Edsall should see that the trap is in perfect order before it is placed on the hive.

The Catalogue of the Iowa State College of Agriculture and Mechanic Arts is on our desk. It shows a healthy condi-The Hon. Eugene Secor is one of the Trustees, and is on the committee of "Farm and Farm Buildings." Among the faculty we notice L. H. Pammel, as Professor of Botany. Both of these gentlemen are apiarists. Prof. A. S. Welch, L. L. D., one of the faculty, and an acquaintance of ours for nearly twenty years, died last March. He was the first President of the Iowa Agricultural College, and a former trustee of the Michigan Agricultural College. He was full of years (nearly 70); a ripe scholar-faithful, able, vigilant. May his rest be peaceful, and his rising from it. glorious.

The October number of Insect Life. issued monthly by the Entomological Division of the United States Department of Agriculture, contains a full report on the horn-fly, which has been the subject of consideration in the Division during the past two years, and of special investigation during the past summer. This horn-fly pest has been a torment to the stockmen and dairymen of the Eastern States.

Jno. C. Swaner, of Salt Lake City, Utah, has sent us his new Catalogue for 1890, and is the earliest comer, Nursery Stock, Flowers, and Bee-Keepers' Supplies.

### GLEAMS OF NEWS.

#### To Destroy Ants.

A correspondent asks for an efficient remedy for ants in the apiary. The following will give the desired information:

To destroy large ants of the kinds which gnaw holes through corks of molasses jugs, and get into sugar boxes and barrels, and sweets generally, sprinkle a little sugar or molasses where they will find it. When they get well baited, sprinkle a little good insect powder among the sweets—just a light sprinkling—and keep them supplied as long as they will come for it. They will go back to their nest, some of them carry-ing enough on their feet to destroy them all.

To destroy small red ants, dust a little in-sect powder for an inch or two around the leg of the table which they crawl up, and the next morning the table will be free of them, if no other way has been used by them. Do not sprinkle so much powder that they cannot crawl through it; their legs are short. A good many of them will be found close to the powder, but some will carry off a little powder on their feet. It is carry on a little powder on their feet. It is well to sprinkle powder along the road they travel. When on a permanent shelf, find, if possible, the road they use and dust it. If you cannot find their roads, dust the whole shelf lightly, and they will disappear. It sometimes takes four years to entirely destroy these ants.

#### Bee-Stings for Rheumatism.

Dr. Terc, of Vienna, Austria, has again tried bee-stings on a rheumatic patient. Upon saturating the patient's system with the bee-poison, the rheumatism disappeared -not to return again for a long time. Dr. Terc has applied his remedy in 175 cases, and has inflicted 39,000 stingings, and now keeps a colony of bees on his premises, to be employed in this work. So says en exchange.

A complimentary notice of Mr. I. R. Good appears in the Nappanee News, from which we copy the following:

Mr. Good has been one of our most energetic citizens, having built many dwelling houses here during the past two years. As a member of the Town Board, his serwere acceptable to our citizens, as rendered by a conscientious worker. News regrets to see him take his dearture.

The Farm Journal, Philadelphia. Pa., has the largest circulation of any agricultural periodical in the world-150,000. It is now in its 13th volume, and is a good, practical Monthly. We can offer the Farm Journal and either the AMERICAN BEE JOURNAL OF the ILLUSTRATED HOME JOURNAL from now until Dec. 31, 1890, for \$1.20.

Or, we will give it free for one year to any one who will send us one new subscriber for either of our Journals with \$1.00 (the subscription price).

This grand offer should bring us thousands of responses at once.

#### Artificial Comb Honey.

The old "gag" from the Herald of Health, comes up again, and is going the rounds of the press again. Here it is:

Artificial honey, which is more common in the market than consumers know, is made of potato starch and oil of vitriol. Some rash optimists think that they are sure of getting the genuine product of bees and flowers by purchasing honey in the comb. They do not know that the exquisite white comb that pleases them is often made of paraffine wax.

If it is so common on the market, why does not some one produce a pound or so of it, and show it as a sample? Not a pound of it has ever yet come to light! No, not an ounce of it!! Gentlemen, either show us a sample, or. stop this lying about the matter!

#### Honey Almanac.

Concerning this helpful annual, Mr. C. Theilmann makes some suggestions. He

The Honey Almanac will surely pay honey-producers, and make large returns, if all will take hold of the matter in earnest and distribute them liberally with their honey. The cost is so small (only 1½ cents each, by the thousand) that we can all afford to work together and distribute themmaking a rousing advertisement, and sell-ing the whole honey crop; at the same time we are furnishing the best and healthiest of sweets to consumers.

Honey is an excellent medicine for sore eyes; it is as good as anything that can be had. Apply the honey by dropping it into the eyes before going to bed, or after lying down. If it is too strong, dilute it. It is good for man or beast.

Its 32 pages are filled with interesting facts, figures and suggestions concerning the uses of Honey for Food, Beverages, Cooking, Medicines, Cosmetics, Vinegar, etc. Also, its effects on the human system are tersely noted; a brief refutation is given of the Wiley lie about manufactured comb honey; a short dissertation sets forth the mission of bees in fertilizing the flowers, and increasing the fruit product. Instead of being an injury to fruit, bees are the fruit-growers' best friends.

Beeswax, its uses, how to render it, and its importance as a commercial product, is described, and 17 useful Recipes are given.

Each alternate page is an illustrated calendar for the month-making a complete Almanac for the year 1890.

This Honey Almanac places in the hands of bee-keepers a powerful lever to revolutionize public sentiment, and create a market for honey, by making a demand for it in every locality in America.

Wisdom would dictate that a million of them be scattered by the first of January.

Prices: \$2.50 per 100; 500 copies for \$10.00: 1.000 copies for \$15.00, delivered at the freight or express office here. The bee-keeper's Card will be printed upon the first page, without extra cost, when 100 or more are ordered at one time. Postage, 40 cents per 100 extra. All orders can now be filled as soon as received.

#### Wooden Combs.

Mr. L. A. Aspinwall, of Three Rivers, Mich., had on exhibition at the late convention in Chicago, a wooden comb, which had been used by the bees for two seasons. This he had placed in our Museum for the inspection of our visitors.

These combs were mentioned on page 616, by Prof. Cook, who has also a colony of bees working on them.

In order to make such "combs," pieces of wood of the right thickness are sawed from the end of a pine block. In the sides of these pieces of wood, holes like cells are bored by gangs of little "bits," which are not allowed to meet, leaving a "base" for the cells. These "combs" are then dipped in melted wax, and placed in a honey extractor, and the surplus wax thrown off by the extractor being run rapidly.

Mr. Aspinwall claims these advantages for the wooden combs:

- 1. The combs are absolutely straight, and
- the cells perfect.

  2. They are very durable.

  3. They will admit of rough transporta-
- 4. The bee-moth's larvæ cannot infest
- them.

  5. The honey can be extracted without any possibility of injury to the combs.

  6. They admit of permanent queen and
- ssages. ne and worker increase can be 7. Drone
- 6. Drone and worker increase can be controlled, drone-traps being unnecessary.

  8. An increased yield of comb honey can be obtained, by reason of a preference for natural comb, queen-excluding honey-boads being necessary.

  9. The green can be found, more readily.
- boads being necessary.

  9. The queen can be found more readily, there being no spaces between the edges of the comb and the frame, in which she can
- 10. The great advantage to be derived from its use, one of more value than all the others combined, is that the hive furnished with this comb may be used as a swarmer or a non-swarmer, as desired.

In addition to this, says Mr. Aspinwall, "should it prove to a be a perfect nonswarmer, the success of bee-keeping will not necessarily depend upon its being conducted as a specialty; but with non-swarming hives, a hundred colonies of bees can quite readily be handled in connection with some other pursuits. Of course I refer to a non-swarmer without manipulation. We can succeed in that direction at present by excessive manipulation, which of course will not pay."

As it is impossible for bees to rear drones in these combs, Mr. Aspinwall reasons that as they will not swarm without drones, they will not swarm at all.

We shall watch this invention with interest, and keep our readers posted as to its progress.

#### Convention Notices.

At the request of several bee-keepers, I here-by make a call for a meeting at Higginsville, Mo., on Thursday, Nov. 14, 1889, at 9 s.m., for only one day, for the purpose of organizing a bee-keepers' associ-ation. Let all bee-keepers attend, that can do so. J. W. ROUSE, Santa Fe, Mo.

The Northern Illinois Bee-Keepers' Association will hold its annual meeting in the Supervisors' Room of the Court House, at Rockford, Ills., on Dec. 16 and 17, 1889.

D. A. FULLER, Sec.

#### The Lindens and the Bees.

Written for the American Bee Journal
BY DAVID HALL.

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"Twas a bright, pleasant morn in the month of July, As the sun came up clear in the East, And twelve hives of bees that were standing near by Were awaiting a glorious feast:

For the basswood just then was beginning to bloom And each day with its long summer hours— I knew that the bees would need plenty of room To store from those beautiful flowers;

For we'd had a warm rain for some days before, And Nature meantime had distilled A nectar as sweet as Hymettus' of yore, With which the cups of those blossoms were filled.

Soon the bees from those large double-hives sallied forth,

And took a bee-line for the wood;
And they loaded themselves up for all they were worth,

As a good strain of bees always should.

And the way they rolled in, tumbled in, 'twas a sight That would make an enthusiast stare And hurrah for the linden, with all of his might, As he waved his hat high in the air.

For more than two weeks worked those bees with a will,

As they worked without favor or fear; And a hundred pounds each was the size of their bill,

As the basswood closed up for the year.

Then, hurrah for the linden tree! Long may it

O'er this beautiful land of ours, And give us henceforth, as it always gave, Its honey-producing flowers. Warsaw, N. Y.

### QUERIES REPLIES

#### Comparison of Italians and Blacks on Red Clover.

Written for the American Bee Journal

Query 665.—Do Italian bees work on red clover more than the black bees do ?—P.

Yes.-M. MAHIN.

Yes.—A. B. Mason.

Yes.—J. M. Hambaugh.

Yes.-WILL M. BARNUM.

Yes.—Mrs. L. Harrison. I think so.—R. L. Taylor.

Yes, they will.-J. P. H. Brown.

Yes, decidedly.—C. H. DIBBERN.

It is so reported.—H. D. CUTTING.

Yes, undoubtedly.—Dadant & Son.

Yes. My experience says, five to one.—G. M. Doolittle.

Certainly! There is no doubt about it, in my own mind.—J. M. Shuck.

We have but very little red clover in Louisiana, but I never could detect that bees ever gathered from it.—P. L. VIALLON.

Yes, more than the black bees; but not more than Syrian or Cyprian bees.—A. J. Cook.

Yes, I think that they do; but neither works on it to any extent.—EUGENE SECOR.

It is so claimed, but I suspect that the difference is not so very great.—C. C. MILLER.

Yes, sir, they do; but they do not work on red clover as much as certain crosses between the two races.—James Heddon.

All the evidence is in favor of such an idea. As for myself, I have never tested the matter; all that I know is, Italians under the same conditions, give me far better results than blacks.—J. E. POND.

I think that they do. Some years back I had a fine Italian queen (from a noted breeder in New York) whose colony stored 100 pounds of comb honey, all from a 30-acre field of red clover, about ½ mile away. A number of black colonies that I had, failed to store any surplus. I believe, however, that there are strains of brown bees with a trace of Italian "blood," that do good work on red clover.—G. L. TINKER.

In my locality Italians work on red clover more or less every season; and in my experience of over forty years, I have never seen a pure black bee at work on red clover blossoms. Further, I have made inquiry of a number of old men of observation, and I have never met a man who has seen black bees at work on red clover. I am aware, however, that black bees do sometimes work on red clover in the North, where it grows much less luxurious than it does in Kentucky.—G. W. Demaree.

It is said that Italian bees have tongues long enough to reach the nectar in red clover. They may get honey from it in a dry time, when the clover heads are small. Once we had a ten-acre field of red clover away out at the back of the farm. Mr. Chaddock told me that the bees were "just roaring" on it. I did not go out to see, but I went to the hives, and everything was quiet. There were partly-filled sections on the hives, but they did not get any fuller, and I watched them day after day. I think that the bees smell the honey in the red clover, and try to get it—perhaps they do get a little, but not enough to put in the sections. The best plan is not to count on honey from red clover, and then if the bees do get any honey from it, consider it an accident, and be thankful.—Mahala B. Chaddock.

Yes, they certainly do; but neither Italian nor black bees work on it, generally, to a very great extent, unless the bloom has been hindered by cold weather, and the stem of the flower is shortened thereby.—
The Editor.

#### The Introduction of Queens in Provisioned Cages.

Written for the American Bee Journal

Query 666.—When introducing a queen, is it thought as safe a plan to provide the queen-cage with a paste of honey and sugar for food, as to place it so that honey is within the queen's reach? (If any readers of this paper have actually made experiments in that respect, I should be glad to hear with what results.)—France.

I have not tried this experiment.—J. M. HAMBAUGH.

Both methods are just as safe, and I speak from actual experience of several years.—P. L. Viallon.

Yes; but I have had no experience on that line.—C. H. DIBBERN.

I am not sure that one way is better than the other.—Eugene Secon.

I do not know, but I would as soon risk the honey.—C. C. MILLER.

Not just as safe, but if she has accompanying bees, it will be all right.—A. B. Mason.

I have tried the paste with good results. I prefer a bit of sponge saturated with liquid honey.—M. MAHIN.

I have never been able to notice any particular difference in the result, though it is my practice to use honey.—W. M. BARNUM.

I have many times tried both, and I see no difference. The "paste" is preferred, because it is less trouble.—J. M. SHUCK.

If the colony is otherwise queenless, and have plenty of honey, they will not let the queen die of want.—Dadant & Son.

It is best to place the queen so that she can reach the honey, and the bees have access to the outside of the cage.—H. D. CUTTING.

From experience, I cannot say; from theory, I should expect the queen to suffer, if the bees could not feed her.—A. J. Cook.

In introducing, I prefer a cage with an open side, placed over uncapped cells of honey.—J. P. H. Brown.

Yes, and it is just as safe to give her neither, as in my experience a queenless colony never fails to feed a laying queen.—
R. L. TAYLOR.

I always so introduce when working on the old plan, and have kept queens a week in this way. See my answer to Query 664. —J. E. POND.

Place the cage, so that honey is within the queen's reach. I have had queens die in the cage with food, but I think that they never died when placed on a comb.—Mrs. L. Harrison.

Yes, I consider it just as safe to use that plan as the honey, for in either case she will get enough to eat until she will be accepted, if she is ever going to be received.

James Heddon.

I have kept queens for weeks, as described in my answer to Query 664, but all my experience goes to prove that no queen can be thus kept without some injury to the vitality of the queen. In other words, I do not consider a queen that has been kept away from the bees for a month, as good as she would have been, had she been with the bees all the while.—G. M. DOOLITTLE.

The former plan is fully as safe as the latter. My experiments show that there is no plan of caging the queen upon the combs so safe as the plan of allowing the bees to liberate the queen by eating out a plug of the "Good" candy before getting to the queen.—G. L. TINKER.

He a queen is introduced in the Peet cage, there is always "Good" candy enough to last her until the bees liberate her. I have introduced queens in all the ways, and have not lost many in introducing. I think that the "safest" way for a timid bee-keeper is to get a pound of bees with the queen.—
—Mahala B. Chaddock.

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When introducing queens, I provision the cage with soft candy. I would never cage a queen on a comb where I cannot see the actions of the bees toward her; that is simply "going it blind." In all of my experience I never knew of a queen to suffer for food when supplied with a good article of soft candy, made of powdered sugar and honey; or, what is better, a queen candy made by compressing candied honey.—G. W. Demaree.

#### Essays on Extracted Honey.

We offer Cash PRIZES for the best essays on "Extracted Honey," each essay not to exceed 2,000 words in length, and must be received at this office before Jan. 1, 1890. The first prize is \$5.00; the second, \$3.00; and the third, \$2.00. All essays received on this offer will become the property of the AMERICAN BEE- JOURNAL, and is open for competition to its subscribers only.

### GLEAMS OF NEWS.

#### To Destroy Ants.

A correspondent asks for an efficient remedy for ants in the apiary. The following will give the desired information:

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- natural comb, queen-excluding honey-boads being necessary.

  9. The queen can be found more readily, there being no spaces between the edges of the comb and the frame, in which she can
- 10. The great advantage to be derived 10. The great advantage to be derived from its use, one of more value than all the others combined, is that the hive furnished with this comb may be used as a swarmer or a non-swarmer, as desired.

In addition to this, says Mr. Aspinwall, "should it prove to a be a perfect nonswarmer, the success of bee-keeping will not necessarily depend upon its being conducted as a specialty; but with non-swarming hives, a hundred colonies of bees can quite readily be handled in connection with some other pursuits. Of course I refer to a non-swarmer without manipulation. We can succeed in that direction at present by excessive manipulation, which of course will not pay."

As it is impossible for bees to rear drones in these combs, Mr. Aspinwall reasons that as they will not swarm without drones, they will not swarm at all.

We shall watch this invention with interest, and keep our readers posted as to its progress.

#### Convention Notices.

That the request of several bee-keepers, I hereby make a call for a meeting at Higginsville, Mo., on Thursday, Nov. 14, 1889, at 9 a.m., for only one day, for the purpose of organizing a bee-keepers' association. Let all bee-keepers attend, that can do so.

J. W. HOUSE, Santa Fe, Mo.

The Northern Illinois Bee-Keepers' Association will hold its annual meeting in the Supervisors' Room of the Court House, at Rockford, Ills., on Dec. 16 and 17, 1889. D. A. FULLER, Sec.

#### The Lindens and the Bees.

Written for the American Bes Journal BY DAVID HALL

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"Twas a bright, pleasant morn in the month of July. As the sun came up clear in the East, And twelve hives of bees that were standing near by awaiting a glorious feast :

For the basswood just then was beginning to bloom And each day with its long summer hours— I knew that the bees would need plenty of room To store from those beautiful flowers;

e'd had a warm rain for some days before, And Nature meantime had distilled A nectar as sweet as Hymettus' of yore, With which the cups of those blossoms were filled.

Soon the bees from those large double-hives sallied forth,

And took a bee-line for the wood;
And they loaded themselves up for all they were worth,

As a good strain of bees always should.

And the way they rolled in, tumbled in, 'twas a sight That would make an enthusiast stare And hurrah for the linden, with all of his might, As he waved his hat high in the air.

For more than two weeks worked those bees with a will.

As they worked without favor or fear; And a hundred pounds each was the size of their bill,

As the basswood closed up for the year.

Then, hurrah for the linden tree! Long may it

O'er this beautiful land of ours, And give us henceforth, as it always gave, its honey-producing flowers. Warsaw, N. Y.

### UERIES

#### Comparison of Italians and Blacks on Red Clover.

Written for the American Bee Journal

Query 665 .- Do Italian bees work on red clover more than the black bees do ?-P.

Yes.-M. MAHIN.

Yes.-A. B. Mason.

Yes .- J. M. HAMBAUGH.

Yes.-WILL M. BARNUM.

Yes.-Mrs. L. HARRISON. I think so .- R. L. TAYLOR.

Yes, they will.-J. P. H. Brown.

Yes, decidedly.—C. H. DIBBERN.

It is so reported.—H. D. CUTTING.

Yes, undoubtedly.—DADANT & SON.

My experience says, five to one .-G. M. DOOLITTLE.

Certainly! There is no doubt about it, in my own mind.—J. M. Shuck.

We have but very little red clover in Louisiana, but I never could detect that bees ever gathered from it.—P. L. VIALLON.

Yes, more than the black bees; but not more than Syrian or Cyprian bees.—A. J. COOK.

Yes, I think that they do; but neither works on it to any extent.—EUGENE SECOR.

It is so claimed, but I suspect that the difference is not so very great.—C. C. MILLER.

Yes, sir, they do; but they do not work on red clover as much as certain crosses between the two races.—James Heddon.

All the evidence is in favor of such an idea. As for myself, I have never tested the matter; all that I know is, Italians under the same conditions, give me far better results than blacks.—J. E. Pond.

I think that they do. Some years back I I think that they do. Some years back I had a fine Italian queen (from a noted breeder in New York) whose colony stored 100 pounds of comb honey, all from a 30-acre field of red clover, about ½ mile away. A number of black colonies that I had, failed to store any surplus. I believe, however, that there are strains of brown bees with a trace of Italian "blood," that do good work on red clover.—G. L. TINKER.

In my locality Italians work on red clover more or less every season; and in my ex-perience of over forty years, I have never seen a pure black bee at work on red clover blossoms. Further, I have made inquiry of a number of old men of observation, and I have never met a man who has seen black bees at work on red clover. I am aware, however, that black bees do sometimes work on red clover in the North, where it grows much less luxurious than it does in Kentucky.—G. W. Demaree.

Kentucky.—G. W. Demaree.

It is said that Italian bees have tongues long enough to reach the nectar in red clover. They may get honey from it in a dry time, when the clover heads are small. Once we had a ten-acre field of red clover away out at the back of the farm. Mr. Chaddock told me that the bees were "just roaring" on it. I did not go out to see, but I went to the hives, and everything was quiet. There were partly-filled sections on the hives, but they did not get any fuller, and I watched them day after day. I think that the bees smell the honey in the red clover, and try to get it—perhaps they do get a little, but not enough to put in the sections. The best plan is not to count on honey from red clover, and then if the bees do get any honey from it, consider it an accident, and be thankful.—Mahala B. Chaddock. CHADDOCK.

Yes, they certainly do; but neither Italan nor black bees work on it, generally, to a very great extent, unless the bloom has been hindered by cold weather, and the stem of the flower is shortened thereby.—
The Editor.

#### The Introduction of Queens in Provisioned Cages.

Written for the American Bee Journal

Query 666.-When introducing a queen, is it thought as safe a plan to provide the queencage with a paste of honey and sugar for food, as to place it so that honey is within the queen's reach? (If any readers of this paper have actually made experiments in that respect, I should be glad to hear with what results.)-France.

I have not tried this experiment.-J. M.

Both methods are just as safe, and l speak from actual experience of several years.—P. L. Viallon.

Yes; but I have had no experience on that line.—C. H. DIBBERN.

I am not sure that one way is better than the other.-Eugene Secon.

I do not know, but I would as soon risk the honey.—C. C. MILLER.

Not just as safe, but if she has accompanying bees, it will be all right.—A. B. Mason.

I have tried the paste with good results. I prefer a bit of sponge saturated with liquid honey.—M. MAHIN.

I have never been able to notice any particular difference in the result, though it is my practice to use honey.—W. M. BARNUM.

I have many times tried both, and I see no difference. The "paste" is preferred, because it is less trouble.—J. M. Shuck.

If the colony is otherwise queenless, and have plenty of honey, they will not let the queen die of want.—Dadant & Son.

It is best to place the queen so that she can reach the honey, and the bees have access to the outside of the cage.—H. D. CUTTING.

From experience, I cannot say; from theory, I should expect the queen to suffer, if the bees could not feed her.—A. J. Cook.

In introducing, I prefer a cage with an open side, placed over uncapped cells of honey.—J. P. H. Brown.

Yes, and it is just as safe to give her neither, as in my experience a queenless colony never falls to feed a laying queen.—
R. L. TAYLOB.

I always so introduce when working on the old plan, and have kept queens a week in this way. See my answer to Query 664. —J. E. POND.

Place the cage, so that honey is within the queen's reach. I have had queens die in the cage with food, but I think that they never died when placed on a comb.—Mrs. L. HARRISON

Yes, I consider it just as safe to use that plan as the honey, for in either case she will get enough to eat until she will be accepted, if she is ever going to be received.

James Heddon.

I have kept queens for weeks, as described in my answer to Query 664, but all my experience goes to prove that no queen can be thus kept without some injury to the vitality of the queen. In other words, I do not consider a queen that has been kept away from the bees for a month, as good as she would have been, had she been with the bees all the while.—G. M. DOOLIT-TLE.

The former plan is fully as safe as the latter. My experiments show that there is no plan of caging the queen upon the combs so safe as the plan of allowing the bees to liberate the queen by eating out a plug of the "Good" candy before getting to the queen.-G. L. TINKER.

If a queen is introduced in the Peet cage, there is always "Good" candy enough to last her until the bees liberate her. I have introduced queens in all the ways, and have not lost many in introducing. I think that he "safest" way for a timid bee-keeper is to get a pound of bees with the queen.—
—Mahala B. Chaddock.

—Mahala B. Chaddock.

When introducing queens, I provision the cage with soft candy. I would never cage a queen on a comb where I cannot see the actions of the bees toward her; that is simply "going it blind." In all of my experience I never knew of a queen to suffer for food when supplied with a good article of soft candy, made of powdered sugar and honey; or, what is better, a queen candy made by compressing candied honey.—G. W. Demaree.

#### Essays on Extracted Honey.

We offer Cash PRIZES for the best essays on "Extracted Honey," each essay not to exceed 2,000 words in length, and must be received at this office before Jan. 1, 1890. The first prize is \$5.00; the second, \$3.00; and the third, \$2.00. All essays received on this offer will become the property of the AMERICAN BEE JOURNAL, and is open for competition to its subscribers only.

### CORRESPONDENCE

#### HONEY-PLANTS.

#### Golden-Rod-Comparison with Other Honey-Producers.

Written for the American Bee Journal BY Z. T. HAWK.

I have been greatly interested in reading the reports regarding the value of golden-rod as a honey-plant. the pleasant evenings of the past summer, a good many informal bee-conventions met on my veranda in Denison, Iowa; and the one absorbing question was, "What are the resources

of our range ?" The willows and early spring flowers gave our bees an excellent start in brood-rearing, and fruit-bloom tided them over to the opening of white clover. But day after day our hopes sank lower, for the "off days" of the clover were so many that the bees barely lived. We watched the basswood with great anxiety, and July 1the date on which the first petals opened—was a greater day with us than the Fourth. My 26 colonies began work in supers enough to give me 500 pounds of honey, had they completed them, but that was not to be.

A large pasture of Alsike clover carried them through the starvation period of two or three weeks that always follows the blooming of basswood, and, during this interval, it be-came evident to me that the large weed, Gaura biennis, is coming to the front in our vicinity as a bountiful yielder of both honey and pollen at a time when it is much needed.

This weed is of comparatively recent introduction in Western Iowa, but it is spreading with great rapidity, and fast monopolizing waste places on rich bottom-lands and favorable situations on uplands. From early morning until 9 or 10 o'clock, it yielded nectar in astonishing quantities, the drops at the base of the stamens being as large as small bird-shot, and a branch suddenly shaken would wet the hand with the sticky liquid.

The earlier sources of surplus having failed us, our discussions turned upon the fall flowers, and their relative value to the bee-keeper. The fact was developed that our "club" had only a wavering faith in the goldenrod, though I am inclined to think that we owe more of our fall surplus to it than is at first apparent. The odor of this flower is not to be mistaken, and I have yet to see the September in Iowa—unless it was this year—that the merest novice, in going among my just say the eminent chemist, Maumene, presence of acids or their equivalents in

bees, would not sniff the air and say, "golden-rod."

Our bees are usually busy in the sections until frost comes, and it frequently happens that there are few flowers besides golden-rod in bloom so late in the season; yet I am compelled to acknowledge that it has been on rare occasions only, that I have seen bees at work on it in large numbers. It yielded well in 1886, but in 1887 there were only two days that the bees paid any attention to it-at least so far as I was able to determine. But those were two good days, for the meadows and pastures fairly roared with bees from morning until night, and every yellow head and raceme seemed to have three or four excited little workers contesting possession with the black beetles.

In 1888 I had no opportunity to observe the golden-rod, but this year I noticed the bees quite busy on the tall racemed variety, three days early in September. Possibly they worked some on it later, but I had no opportunity to see them. I only know that

it yielded no surplus. There are four varieties of the plant here, and the bees usually work on all alike. I am inclined to rank heart'sease as the best of our autumal plants for honey, and golden-rod second, with a large element of uncertainty about The asters are very plentiful here, but I am satisfied that they cut absolutely no figure in this locality as honey-plants. After seven years of close observation, I have failed to see a single bee visit them.

Audubon, Iowa.

### HONEY.

#### Some Facts Pertaining to the Production of Honey.

Written for the American Bee Journal BY DR. J. W. M'KINNEY.

I do not wish to make a "surprise" party of the little "honey discussion" incidentally fallen into with Prof. Cook, but sincerely I am "surprised' at the pertinacity with which the Professor adheres to the dogma of honey being "digested nectar."

On page 647, he says that he "belives no scientific authority teaches other than that nectar is cane-sugar, and honey, for the most part, reducible sugar ...... Now there are two ways that the cane-sugar can be changed to honey-either by boiling with acid, or by animal ferment;" and he goes on to say, "As the bees cannot do this in the first way, they must do it in the second."

has found that cane-sugar undergoes the change into uncrystallizable sugar when kept for a long time in aqueous solution, as well as when heated with acids. Saubeiran admits the change of uncrystallizable into grape sugar, but attributes it to a molecular transformation of the sugar, independently of the action of an acid; as according to his observation the conversion takes place only after rest. In confirmation of his views, this chemist states, "that he found the same to be produced by boiling sugar with water alone."

For want of a better term, we might be permitted to say that the acid, to which the Professor refers in the production of honey, exists isomerically in the juices of fruits, in all saccharine juices, and in nectar as well. That is to say, that the acid, or its equivalent, exists in these substances, and it is not at all necessary to call in the aid of the honey-bee, or tax its energies to furnish an acid for the manufacture of honey.

In support of this matter of the preexistence of acids in saccharine juices, etc., I will simply quote what Prof. Franklin Bache says, when speaking of the manufacture of cane-sugar. He

"The acids naturally existing in the saccharine juice, have the effect of converting the cane-sugar into uncrystallizable sugar, by which a loss of the former is sustained." "The lime" (added in manufacturing sugar) "by neutralizing these acids, prevents this result." "The change in sugar which precedes fermentation, namely, the conversion of cane-sugar into the uncrystallizable kind, points to the necessity of operating on the juice before that process sets in; and hence the advantage of grinding the canes immediately after they are cut, and boil-ing the juice with the least possible delay."

Thus we see that not only this formerly eminent teacher of chemistry, but author as well, recognizes the existing fact of the presence of an acid, or acids, or their equivalents in saccharine juices.

I can hardly believe for a moment, that any one, much less Prof. Cook, would deny the presence of an acid, or its equivalent, in the grape, as well as in the juices of most other fruits. By what process of reasoning, or chemical demonstration, he arrives at the conclusion that nectar, a vegetable juice, secreted by the nectaries of flowers, does not possess the acids, or their equivalents, common to all saccharine juices, is very strange.

If the Professor would take this rational view of the matter, recognizing, all saccharine juices, the necessity of invoking the aid of the honey-bee to "make" honey would quite disappear; and in addition to being right, as facts present themselves, it would be a great relief, physiologically, to the idustrious but over-worked honey-bee.

By carefully noticing the Professor's article referred to, it will be seen that he furnishes strong argument in support of the rational fact of honey being concentrated nectar. Yes, the Professor is right in saying, "Any sugar in diluted solution, if kept warm, is liable to ferment or sour' thin honey the same; therefore the necessity of concentration as early as possible, if we wish to prevent thin syrup, or honey, from spoiling by fer-mentation. In fact, nectar must be concentrated before it is entitled to the

name "Honey."
Pure honey is "concentrated nectar." "Digested nectar" will never, never do.

Camargo, Ills.

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#### BEE-PARADISE.

#### Remarks on Bee-Keeping for Northern California.

Written for the American Bee Journal BY D. B. WIER.

This is undoubtedly the best bee-State in the Union, as well as the best for nearly everything else. I came here from Illinois, and looked over every part of the State, both in summer and winter, before choosing a location for a home.

I had had a full sufficiency of bad elimate and poor health in Northern Illinois, and wished to find, first of all, a climate in which I could have comfort and health, and where I could grow pretty nearly in perfection about anything that I wished to plant; where crops were sure without irrigation; and where there were nice people, schools and churches.

All of these things, and about everything that a reasonable person could wish for, I found right here in Sonoma county, 20 to 80 miles north of San Francisco. It is a most beautiful county, with broad, level, and exceedingly rich valleys, and rounded very high hills and mountains, with plenty of the purest water, of fuel, and of lumber; with lands and homes im-proved and unimproved; and all things considered, they are as cheap as elsewhere on the continent.

I mean just what I say in this, that land may be had, and is, just as cheap here at \$100.00 or \$150.00 an acre, as it is in Montana, Dakota or Oklahoma

one has the money to buy; for one can make a better living off of 10 acres here-make more net profit-than he can there off of 160 acres, and, besides, enjoy this perfect climate for health and comfort, where there are no extremes, fierce storms, never hot, and never cold.

Besides, there is a large amount of free mountain Government land in This mountain land is this county. eminently adapted to fruits and bees. It is mountain land, but very rich, and where plowable, one can grow any crop on it that he may desire to plant, from the potato to the orange, and all is the best for pasturing stock.

The climate of the coast range, 10 to 30 miles from the Pacific Ocean, is the pink of perfection for health and comfort, crops and fruits of all kinds, and for bees. Bees must have three things to thrive, namely, warmth, a long season, and plenty of nectar-producing flowers, with flowers so formed that the bees can reach and gather the These three things are everyhoney. where present in the mountains of Sonoma county, at least ten months in the year. One other requisite is feeding-grounds sheltered from rough winds. This may also be found in the mountains.

Having the above requisites, and a canyon opening to the east or south for several miles, or even a mile in length, with a perennial mountain brook gurgling down it, and we have a perfect paradise for the bee-keeper-the brook fringed with its thousands of flowering shrubs, and the mountain sides carpeted with millions of flowers.

I am not a practical bee-keeper, though I have done something in that line, but I am a practical wild-bee hunter, an expert and specialist in that line, for the sport, skill, exercise and recreation found in it. As the girls say, "I dearly love it;" therefore, when going into a new country, among my first enquiries is the one whether bees do well or not.

I was surprised, on making the enquiry, to learn that searcely any bees were kept. I also learned that bees did wonderfully well here for many years, and that the moth and bee-diseases came in and destroyed them. Of course they did, and did so everywhere under the old-fashioned hives and management, in the same way that they are now doing in the southern part of this State, and in the Sierras; in these last two regions, moth and diseases have come in, but they can be managed and controlled the same as bee-keepers do it in the East.

The foregoing facts leave Sonoma county virgin soil without competition frames having the most honey in them, for the skilled apiarist; any one who to the number I wish to winter them

understands the science of modern bee-keeping, can succeed ten times better here. Bee-keeping and fruitculture combined, would be very profitable with light labor here. To those wanting further information of anything in or about this State, I will be pleased to furnish that which is reliable, if stamps are enclosed for reply.

Petaluma, Calif.

#### FALL WORK.

#### Uniting Colonies in the Fall for Wintering.

Written for the American Rural Home BY G. M. DOOLITTLE.

As the season of 1889 has been rather unpropitious for bees in some sections of the country where only white honey is the source of supply, some bee-keepers now find that their colonies have not the necessary number of bees or the necessary amount of stores to give promise of successful wintering; hence they ask what they are to do under such circumstances.

If the colonies were strong in bees, the question might arise whether it would not pay to buy sugar, even at the present high prices, and feed the bees so as to have a greater number next spring, but where colonies are both light in bees and in stores, there is only one correct solution of the problem, which is, to unite the bees till all are strong, and then if stores are still lacking, they may be fed.

There have been many plans given for uniting bees, some of which are too laborious to be tolerated, such as moving colonies little by little each day until they are brought together, carrying them to the cellar for a few days, etc.; the advocates of these plans claiming that by their use none of the bees will return to their former location, yet I find that the more simple plans do just as well where a little precaution is taken by way of removing all signs of the former home from the old stand.

The plan I use, and one which has always worked well with me, so far, is as follows: Having decided that certain colonies are to be united, the first thing to know is, which of the two or three, as the case may be, has the most valuable queen. Having ascertained this, I hunt out the poorest and kill her, then take the hive or hives from which the queen has been killed, to the stand of the one they are to be united with.

I now select from each hive the at \$1.25 per acre, or free to settlers, if can succeed with bees in the East, who on, and set them in one of the hives, alternating them as they are set in the

In moving the bees they are jarred by placing the hives on a wheel-barrow in no gentle manner, and wheeling them rapidly to the place they are to stand, first having confined the bees to the hive, and doing the whole on some cloudy day when the bees are not flying, which causes them, in a measure, to forget all about their former home in their anxiety for the present; and also causing them to remain on their combs much better in handling them than would be the case were they not thus disturbed, so that in the process of uniting, very few bees take wing in comparison to what otherwise would, and these few are so bewildered that they immediately go in with the others in the new hive or united colony.

Having the hive full of the combs containing the most honey, I next shake the bees, which are on the remaining frames, off at the entrance, taking one frame from one colony, and the next from another, and so on, so as to mix the bees up as much as possible. When all of the bees are inside of the hive, the work of uniting is done. Remove the hives, bottom-boards and all from the stands occupied by the united colonies previous to this, and no loss of bees will occur.

What few bees go back to the old stands, return after finding their old hives gone; also the mixing-up process spoken of above, causes them to mark their location anew, at their first flight afterward, the same as does a new swarm, or when the bees take their first flight in the spring. Borodino, N. Y.

#### VISITING.

#### An Interesting Account of a Lady Bee-Keeper's Visits.

Written for the American Bee Journal BY MISS IDA HOUSE.

The basswood flow was immense here the past season, and lasted nearly three weeks. Our bees forgot to swarm after they began to work on the basswood, so we had 160 strong colonies already for work. We (my brotherin-law and I) took off at least 12,000 pounds of honey, the most of which is basswood.

The season was so dry that we did not get any fall honey to speak of. After getting the bees ready for winter, and packing our trunks, we left the bees to the merciful care of my brother-in-law, and started for my old home in the southern part of the State, where we arrived all safe, and sound honey, and left them. The next morn- want it next to me, on top!

the Minneapolis Exposition.

While looking at the grand display of nearly all kinds of industries, and seeing the beautiful castles and palaces made of grain and corn, we could not help wondering where the products of apiculture were, and so we built an air-castle (of magnificent grandeur) out of beautiful honey and beeswax, and furnished it with all the articles necessary for bee-keeping, while near by was the ideal apiary with all its modern improvements.

Since our return home we have been to visit a bee-keeping friend, Mr. Turnbull, who may well feel proud of his beautiful hillside apiary, which consists of 240 colonies of bees, in rows of neatly-painted hives, with shade-trees, honey-house and workshop, and last, but not least, his beautiful home and loving wife and chil-

We wandered into the honey-house, where Mr. Turnbull was busy getting his honey ready for market. He has about 8,000 pounds of what would have been beautiful comb honey, had not a careless bee-keeper ruined nearly 500 pounds of it when removing it from the hives.

The following interesting incident happened while we were there:

Mr. Turnbull was greatly troubled with the bees in his honey-house, and he had spent hours in trying to find where they got in; but, alas, not even a knot-hole could he find for the bees to get through; but on Oct. 11th, in removing a large case of honey, he saw a cluster of bees hanging from the ceiling. He came to the house, got a light, and said that he wished I would go and see what I thought about them; and I found, to my surprise, that they were clustered on pieces of comb fastened to the ceiling.

Mr. T. asked if I thought they had a queen. I did not think that bees would build comb without a queen, or any prospects of one, and he was of same opinion. So, with Mrs. Turnbull, her sister and my sister, near by, to caution us to be careful, or we would get stung, we put a hive under the bees, took a sharp knife, and cut the comb down, which fell into the hive with the bees.

(About this time our friends were called upon to make a hasty retreat. I saw no more of them until I returned to the house, and then I was not sure but what I had gotten into an apothecary's shop, or hospital; but the evil spirit within me burst forth in peals of merry laughter, in which they all joined, until the walls gave back the echo).

after spending a most delightful day at ing they had a nice queen, and were very quiet-in fact, I think that they were tired of camping out, and felt grateful to us for their new home.

We were sorry when we had to bid our good friends good-bye, but we hope to visit them again in the future.

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Hokah, Minn., Oct. 25, 1889.

#### WINTERING.

#### Preparing Bees so as to Winter Without Loss.

Written for the Kansas Convention BY REV. J. D. GEHRING.

In regard to wintering, I can say that I have never lost a colony yet from any cause. I do not think that bees will freeze to death if they have accessible food of a proper kind. If they starve to death, or die on account of bad food or want of ventilation, the bee-keeper (?) ought to be punished

for "cruelty to animals."

I believe that the "extractor," together with the effect of penuriousness, are to be blamed for winter losses, more than anything else. My theory is this: Give them plenty of good honey—that is, leave plenty in the hives, and tuck them up snugly, and then let them defy the hardships of a winter's siege. A solid frame of honey on each side of the brood-nest is, in my judgment, worth more than cushions or blankets.

#### Hive-Ventilation in Winter.

Another important matter is ventilation, the silly arguments to the contrary notwithstanding. Moisture, which is as inevitable as it is essential in a strong, healthy colony, seeks escape upward—as soon as it goes the other way, it has condensed, and mischief is brewing. Well, superfluous moisture must have vent, and nature says "upward." But, it is just as true that the escape of heat, in the same direction, must be prevented by top-packing.

I think that this theory is supported

by philosophy and personal experience. Allow me to illustrate:

If I desire to keep warm in bed, I want the covering just right—not too heavy, and not too light. It does not matter so much what kind of a bed I have under me-so that it is not too short or too narrow; but I want enough warm, soft, and at the same time light, covering. If the covering is heavy and stiff, I perspire, and get colder and colder. I also want the covering close to my body, snugly tucked in. It would not do me any good to put a blanket or two on top of the house that I may be in; nor do I want it under me, or at either side; I Now, the same philosophy I apply to the packing of my bees for winter,

1. Have the hive near the ground, and protected from the cold winds.

2. Leave enough of the entrance open for ventilation. This is even more important in winter than in summer, because in warm weather the bees provide air by "fanning," but in cold weather they are semi-dormant.

3. Have an abundance of good honey (not syrup) in the hive—much more than you think they will need, and provide passage-ways from one side to the other of the brood-nest, on The best thing for this, that I have tried, is the following:

Saw laths in lengths to reach across the brood-nest to within an inch or more on each side; nail the pieces, two by two, together so as to form a trough, and lay three (or more) on top of the brood-nest, equal distances apart; then put on top a piece of good burlap (never enamel-cloth, oil-cloth or heavy duck) cut large enough to be fastened down all around, so that the bees cannot get out into the top packing.

4. Pack with leaves, chaff or fine pine shavings, from about four to ten inches on top, and put on the cover— not forgetting to have at each end of the cover an inch anger - hole covered with wire-cloth, for the escape of moisture.

5. Do not unpack, frequently disturb, or manipulate too early in the spring; but watch them closely, all the same.

6. A good queen in February and March means a good working colony, and surplus when clover blooms. When I say in February and March, I of course mean that the bee-keeper should see to it that each colony has a good queen when packed for winter, or when this, for any reason, cannot be, provide one not later than February or March, by doubling.

When I want to unite or transfer. I take both hives into a warm room, or into the cellar, for the purpose; and after a few days I put the strengthened and queened colony back to its stand.

The foregoing is my "system" of wintering bees. I think that there has been, and is, too much written and said by leading men in the bee-business, about "cellar wintering," "bee-diarrhea," "spring dwindling," etc., to the confusion and dismay of "green beginners."

Much depends upon the kind of hive used; but more depends upon the kind of management applied.

Lawrence, Kansas.

Subscribers who do not receive this paper promptly, will please notify us at once.

#### E'S RUBBLES.

BY EUGENE SECOR.

A golden-haired boy sat alone on the floor,
With a basin of suds beside him;
From a new clay-pipe he tried o'er and o'er
To make fairy worlds o'er-ride him.
With patience and skill
His globe assumed shape on the pipe-rim.

With delicate grace it floats in the air,
In beauty excelling the rainbow;
With bright, eager eyes he follows the fair
Creation before him, when, lo,
A breath from somewhere,
Somehow entered there,
And his fairy-world vanished in to-to.

A few fleeting years and this golden-haired boy Has led to the altar a maiden: The life that now is, seems his to enjoy; And with love and sweet duty to aid in The voyage of biles, With what more than this Doth the "barque of life" need to be laden?

A woman as fair as the daughters of Job, And as pure as the breath of heaven; Had a scraph descended in spotless robe, No holier wife had been given. But, sudden and soon, Before her life s noon, On mortalities rock the barque was driven.

Alone in the world, he in sadness awhile Atone in the world, he in sadness awnite
Doth ponder the problems of sorrow;
But Time, the great healer, doth ever beguile
The heart to think well of to-morrow;
And grief is assuaged
When the mind is engaged,
And hope from the future doth borrow.

The goddess of wealth now allures him to toil,
With the promise of plenty and pleasure,
Assuring the honors from which no recoil
Should come in his moments of leisure.
And riches did come
In generous sum,
When solely intent on earth's treasure.

As apples of Sodom to ashes are turned,
When pressed to the lips of the finder,
So, false and deceptive, at last he has learned
That wealth is a phantom reminder
Of treasures where rust
Corrodes not, nor dust
Shall mar the sweet peace of the finder.

'Tis thus we're reminded, as time and again Our hopes in things earthly are shattered, That Solomon said, all things are but vain. No matter how much they have flattered; One certain, pure joy, Content without alloy, Shall come when ambitions are scattered.

Forest City, Iowa.

#### BEE-DISEASE.

#### Results of the Season-Marketing the Honey Crop.

Written for the American Bee Journal BY C. THEILMANN.

On page 635, Mr. Skinner asks me for further explanation regarding the "nameless bee-disease," but does not say what I should explain, so I am in the dark. I will with pleasure explain anything that I know about this disease, which is not explicit in my article on page 584.

I believe that 'bees should have access to salt, where creeks and rivers are far away from the apiary; but I do not think it a necessity where they are near, and where lots of cattle and other stock have watering-places, where the bees find all the salt they

need to carry on their household. know that they like this kind of salt better than our common cooking-salt.

In past years I tried to feed my bees salt and water in troughs, but they would never touch it, because they got all they wanted at the watering-places, which apparently suited them better; so now I do not put out salt for them. I cannot believe that the want of salt causes the "nameless bee-disease."

In addition to my article on page 584, I would say, that in Gleanings, page 740, the black, hairless shiny-bees are spoken of by "Amateur Expert," who writes that the disease is known as "bacilli depletus." According to my observations, this seems to be nearer right, than that the lack of salt is the cause of the disease, though salt will check the disease; but whether it is "bacilli depletus," or parasites, who knows? The actions of the bees look as if they had the itch or scrofula.

#### Report for the Season.

I commenced the spring of 1889 with 185 colonies. The weather up to the forepart of June was unfavorable, and I had to feed about 1,500 pounds of honey and sugar to save my bees; but from the middle of June until Sept. 1, we had a continual flow of nectar, with the exception of a few days. Linden was in bloom for 21 days, on account of the cool weather while it was in bloom; this was the longest time I have ever seen linden in bloom. It generally lasts from 6 to 10 days; once only in 20 years it lasted for 14 days.

My crop is 3,000 pounds of extracted, and about 22,000 pounds of comb honey, of excellent quality, one-half of it being white. I have sold about half of the lot at  $12\frac{1}{2}$  cents per pound here; that is, I deliver it on board the cars.

#### Dealing with Commission Men.

A good deal has been written lately about commission men. There are just as good and honest commission men as there are among other classes, and also some bad ones, from whom I have had to learn dear lessons. I like to sell my honey for cash, even if I get a cent or two less for it; but I cannot always do this, and then I do the best I can. Even last year I sold all but about 1,500 pounds, which was sent on commission to a man who was quoted from \$40,000 to \$50,000 in Dunn's Mercantile Agency; when I got my returns this fall, the statements showed 12½ cents per pound for the same honey that I sold and got my money for last fall at 17 and 18 cents per pound. We should all try to sell our honey for cash.

Theilmanton, Minn.

#### THE SOUTH.

#### Wintering Bees in the South and Summering them North.

Written for the American Bee Journal BY JOHN CRAYCRAFT.

I was greatly pleased with G. M. Doolittle's letter on page 581. It opens another field in the progress of profit-able bee-keeping, both for the North and the South, which is certain to become profitable to the bee-keeper in the North and South in about the following manner, as I, at this time, look at it :

About Sept. 1, put up all the bees in colonies that have not an abundance of honey for wintering safely; and ship them to the South to some partner in the trade, and he can turn them on empty combs, or partly drawn foundation, and they will then build up before the fall honey is all gathered along the St. Johns river swamps here, and he could get a full crop of the orange honey in March and April, and such part of May as they might be kept before returning them to the white clover fields of the North. Such a transportation of them could be made with a very small expense. All their winter stores could be saved, or whatever they may have had, and turn the new young bees from the South on the combs.

If in September you send to your partner in the South, say 25 or 50 queens, and an average of 2 or 3 pounds of bees, and have a like amount returned in May, or such time as the season or location permitted, the same cases that they were shipped in would do to return them in again. This seems entirely practical at a glance, as it were.

First, the wintering problem would be solved, for there would be no feeding to carry them through the long, cold winter.

Second, there would be as many, or more, young and vigorous bees ready for the field when the harvest came next May.

Third, is the cost. The cages would be the first and greatest cost at the start, but with care they would last through many seasons. If packages weighing as much as four pounds were sent by mail, the postage would be 64 cents on each; but if such packages were put up in lots of 5 or 10, I think that the express company would carry them at a less cost than by mail, and with greater safety. They could be so put up that 2½ pounds of bees, cages and feed would not weigh to exceed 5 pounds, after they were crated in lots of five or ten, and I think that they would not cost, in expressage, more keep bees that would prove to be com- queen was thrown out, and the end of

than 25 or 30 cents per cage in such With that amount of bees, there lots. would be but little trouble of their producing a good gathering of honey, if the season was favorable.

I would put the cost of one cage, with feed, 50 cents; express charges, both ways, per cage, 80 cents; cost of their winter care and putting up again in the spring, per cage, \$1.00-making a total of \$2.30; and this would mean as many bees returned with the same queen if living, and if not, with a young laying queen.

The expense of \$1.00 for their care would not compensate the partner in the South, but he would have the honey that the colony gathered until the 1st or the 20th of May, as the case might be; and with proper care he would have a colony of young bees, brood and eggs, that would soon rear them a queen, if he had not already a young laying queen, or a cell ready

for cutting out.

I think that such a change could be made profitable to both parties. The one North would have no wintering trouble to go through, a saving of at least 20 pounds of honey, no labor and care, and have as many bees to turn in the old hive as were taken away, and all young and vigorous, and ready for labor. The one at the South could have a new colony of bees left after replacing as many bees as he received, besides all the honey that they may have gathered. But if the mails will carry bees up to as many as would make a 4-pound package, that would certainly be a very great help to the fraternity.

I have my bees on the St. Johns river, between Lake George and Sanford on Lake Monroe, at St. Francis, a few miles from Deland. I have had my bees on the river for a year, and having studied the flora there tolerably well, I have decided to go into beekeeping almost exclusively, with my son, who is a thorough, practical beekeeper for a boy of 17 years; but we have only a small apiary of 40 colonies. We did not desire to increase them until we were certain of our location being a good one, and the honey first-class.

There is no finer honey than the pure orange-blossom; and the wild grape-vine honey, along the river swamps, cannot be excelled by any honey that I have ever seen. I kept bees in Indiana, and one season I had the charge and the management of Dr. N.P. Allen's bees, of Smith's Grove, Ky., in the best white clover fields that I ever saw, and the clover does not excel the wild-grape. I am satisfied with Florida as a honey-producing State, but there are many locations to

plete failures. I would like to have this sending of queens and bees South to be wintered, and returned in the spring, tested, so that the cost, expenses, profits and losses will be established the coming winter, so if it were found to be practicable and profitable to both parties, we would prepare to receive and care for several hundred colonies next year.

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Altoona, Fla.

#### ZINC EXCLUDERS.

#### The Use of Cell-Cups for Queen-Rearing-Golden-Rod.

Written for the American Bee Journal BY JOHN S. REESE.

Several items published recently in the bee-papers in regard to perforated zinc, prompts me to give my views.

First, the perforations must be of such size or width as to exclude all queens and drones, and give free passage to all workers. This certainly has been accomplished, judging from my experience with at least one "make" of zinc, which I duplicated with my

foot-power punch.

The next point to be considered, is getting as many holes ? of an inch long in the zinc as possible, and yet retain the necessary strength or rigid-ity; the object of this being to obtain as little resistance to ventilation through the zinc as possible, therefore the square-cornered hole is a necessity to accomplish the desired end. is especially desirable when the zinc is to be used in traps and as entranceguards, so as to give the bees every opportunity of ventilating their hives during warm weather.

The traps that I use have a strip of this zine (through which the bees pass in and out), about two inches wide and as long as the full width of my hives-153 inches; and the traps can be, and are, frequently left on the hives for weeks at a time, during the hottest days in July and August, with no bad results of any kind.

#### Cell-Cups for Rearing Queens.

The Doolittle cell-cups have proven very satisfactory with me, especially when necessary to remove a cell, in any state of development, from one frame or hive to another. The cups have such a solid base that they can be stuck around anywhere.

I keep a lot of the cups convenient, and when cells are wanted, the royal jelly is transferred from the surplus cells that have been taken from the hives at different times, and laid aside for future use; the grub or young

the cell pinched together to exclude the air and keep the royal jelly from drying up. I have used the food for a number of these cells after keeping them for several weeks-indeed, have just used some of it to-day (Oct. 19), that has been taken from the hives more than a month, and the jelly was perfectly fresh. Next season I shall try keeping some of this royal jelly in a small bottle.

On one occasion I softened up with water some of this queen-food that was dry and hard, and it answered every

purpose in the cell-cup.

The little grubs can be taken in a few moments from the combs of the choice queen, without cutting or injuring the combs. This requires very little practice to enable any one to select the grubs, and transfer them very rapidly, and frequently without removing or disturbing the bees on the comb.

#### No Honey from Golden Rod.

Golden-Rod in the "blue-grass" region of Kentucky has never furnished any honey, as far as I have been able to learn; but the asters do, and to-day my bees are coming in loaded with honey and lemon-colored pollen from them, and every comb is loaded to the guards with honey and pollen, which insures every colony to winter perfectly on their summer stands, with six inches of sawdust and a water-proof corrugated iron-cover. Winchester, Ky.

An Open Apple Tart.

Stew some apples till quite soft; take out any hard pieces, beat them to a pulp, and to half a pound of pulp allowsix ounces of sugar, five eggs and the grated rind of a lemon. Beat all these well together, then add gradually five ounces of melted butter. Linea dish with puff paste, pour in the mixture and bake

#### Chocolate Cakes.

The whites of eight eggs, half a cake of chocolate grated, one pound of sugar, six ounces of flour. Beat the eggs to a stiff froth, add the sugar, then stir in the chocolate and flour. Butter flat tins, and drop the mixture thereon; not too closely, as the cakes will spread. Bake a few minutes in a quick

For Neuralgia.

Boil a handful of lobelia in a half pint of water, strain and add a teaspoonful of fine salt. Wring cloths out of the liquid, very hot, and apply till the pain ceases, changing as fast as cold, then cover with a dry cloth for a while to prevent taking cold. Two large tablespoonfuls of cologne and two teaspoonfuls of fine salt mixed in a bottle makes an excellent inhalent for facial neuralgia. Horseradish, prepared the same as for the table, applied to the temple or wrist, is recommended

Europe has 200 unions of men who sew for a living. The members earn about \$3 a week and live and dress poorly.

#### CONVENTION DIRECTORY.

Time and Place of Meeting.

Dec. 4-6.—International. at Brantford, Ont., Canada R. F. Holtermann, Sec., Romney, Ont.

Dec. 16, 17.—Northern Illinois, at Bockford, Ills. D. A. Fuller, Sec., Cherry Valley, Ills. May 2.—Susquehanna Co., at Hopbottom, Pa. H. M. Seeley, Sec., Harford, Pa.

In order to have this table complete, Secre taries are requested to forward full particulars of time and place of future meetings.—ED.



#### Nebraska Fair Premiums.

We have had a splendid fair. I took premiums on fruit, grapes, and bees and honey to the amount of over \$100. I had 45 varieties of grapes alone, on exhibition.

WM. STOLLEY.

Grand Island, Nebr., Oct. 28, 1889.

#### Moving Bees a Long Distance.

It will be seen by my address that I have made quite a move. I shipped 48 colonies of bees from Dubuque, Iowa, to Tacoma, Wash. Ter., sustaining a loss of 8 colonies, being 12 days on the road. This is the longest shipment that I know of, being nearly 2,200 miles. The possibilities of bee-culture here, I think, are great. Here grass and flowers now look like they do in May in Iowa.

C. A. Phenicie.

Tacoma, Wash. Ter., Oct. 26, 1889.

#### Bees in Box-Hives.

I concluded that two of the 7 colonies in box-hives, mentioned on page 652, did not have stores enough to keep them through the winter, so I destroyed them, leaving only 5 good colonies, 3 of which did not have honey enough to satisfy me. I have fed them some sugar syrup. I propose to leave them on the summer stands all winter, and put corn-stalks around them. Mr. Swezy, a bee-keeper living in pose to leave them out all winter, and put corn-stalks around them. Mr. Swezy, a bee-keeper living in Brook Haven, does not give his bees any protection whatever in the winter. He just lets them stay on the summer stands. Out of 6 colonies he has only 2 left; I purchased 2 of them, and 2 died, leaving him only 2.

Bellport, N. Y., Oct. 14, 1889.

#### First to Ship Bees by Mail.

We have just read the article on page 667, in which Mr. C. J. Robinson accuses Mr. Langstroth of unfairness, and of not giving him (Robinson) the due honor of having been the first to send queens safely

having been the first to send queens safely by mail.

Mr. Langstroth is human, and consequently has his faults as well as Mr. Robinson, or any of us; but we wish to say publicly, that in this case Mr. Langstroth is not to be blamed at all. When we took the revision of the book, "The Hive and Honey-Bee," from the hands of Mr. L., his most emphatic desire was, that we give honor to whom honor is due, and he expressed the opinion that we would try, as hard as any one possibly could, to do this to the fullest extent. The work of revision had hardly extent. The work of revision had hardly begun, when Mr. L. took sick with the disease that has so long prostrated him, and that is even now keeping him from the world. We were, therefore, deprived of

his help, and of his counsel. When we took up the subject of mailing queens, we searched the oldest volumes of the American Bee Journal for the names of those who had first shipped bees by mail. If Mr. Robinson is there mentioned, we did not see it. Had we found it, we should certainly have given him credit, instead of giving it to Messrs. Townley and Alley. But let Mr. Robinson's ire fall on us, and not on Mr. Langstroth, who has nothing to do with it. do with it.

Since Mr. Robinson has a letter from Mr. Langstroth, acknowledging that he was the first man to ship bees safely by mail, we stand ready to give him due credit for this in the next edition of the "Hive and Honey-Bee." Chas. Dadant & Son.

Hamilton, Ills.

#### Poor Honey Harvest.

The honey harvest was a poor one again this year in Somerset county, Pa. I would have had to feed, like I did last season, but buckwheat yielded some honey, and goldenrod also yielded well for about three weeks. This was the only honey we have to winter bees on, as almost all the white clover and linden honey was used for breeding.

D. D. JOHNSON.

D. D. Johnson. Summit Mills, Pa., Oct. 25, 1889.

#### Excellent Results.

The American Bee Journal is a very welcome visitor in our family every week. I wintered 26 colonies in the cellar last I wintered 26 colonies in the cellar last winter, lost one, and since I have increased to 40, and have taken off 800 pounds of No. 1 comb honey, and 200 lbs. or more of second and third grade honey. The weather has been too wet and cold for good results, so say experienced bee-keepers. With myself, this is the fourth best season thus far.

C. Guilford.

Cuba, N. Y., Oct. 28, 1889.

#### Good Yield of Honey.

I put 15 colonies of bees in the cellar last I put 15 colonies of bees in the cellar last November, and all came out in good condition in the spring. They did fairly well through April and May, but June was so excessively wet that the first half of the white clover bloom gave but little hone; however, about July 4, the weather cleared up so that the bees did well on the profuse white clover bloom, till the basswood commenced to bloom, which was about July 15, and that lasted the balance of the month. menced to bloom, which was about July 15, and that lasted the balance of the month, and yielded moderately well. Twelve colonies, which I worked for extracted honey, gave about 1,300 pounds of clover and basswood honey, and 500 pounds of fall honey, which is a good yield for this locality. There is a good demand for honey, on account of the scarcity of fruit, and I locality. There is a good demand for honey, on account of the scarcity of fruit, and I have sold nearly all of mine at my own door, at 10 cents for the white honey, and 7 cents for the dark. The yield from buckwheat was light, but I have not known the golden-rod to yield so well in many years.

DAVID HILL..

Warsaw, N. Y., Oct. 28, 1889.

#### Golden-Rod-Good Season.

As "Golden-Rod" is being tried by a jury of apiarists, suppose we should all give in our testimony. It is very abundant in this vicinity (Waushara county) and, judging by the way the bees work upon it, it is a most excellent honey-plant. I have many times seen several bees upon a single stalk.
There are at least two varieties here, both
of which yield honey. In my opinion,
golden-rod has redeeming qualities enough to entitle it to become our emblematic flower; it is wide spread, and universally known and admired by every one, and it is so modest that it does not infringe upon space alloted to anything else, but is constant with the foresterners dry marshes. tent with the fence-corners, dry marshes, and other waste-places where it can be seen gracefully lifting its hat, and nodding its golden head to its welcome guests—the

This has been quite a good honey season for this section, though not nearly as good as we used to have in days of yore. My bees averaged nearly 60 pounds of comb honey per colony, spring count, and I increased them 40 per cent. All are well

supplied with stores for winter.

B. T. DAVENPORT.

Auroraville, Wis., Oct. 27, 1889.

#### Golden-Rod His Favorite.

In regard to the golden-rod, I would say that when I was living in Illinois, I had 85 colonies of bees, and I must say that the golden-rod honey I got in the fall was the finest of all the fall honey, and I obtained lots of it, too. It was my favorite for my own use, and I would not eat any other as along as the golden-rod lasted. If I had 50 votes to cast, I would give them all for golden-rod as the national flower.

JOHN BOERSTLER.

Vashon, Wash. Ter.

#### Big Stock Farms and Stakes.

The largest breeding establishment in America for thoroughbred horses is the Belle Mead stock farm, in Sumner county, Tenn. It contains 4,000 acres. The richest stakes ever won in America were the Peyton, run at Nashville in 1843, and the Futurity, run at New York in 1888. Each was worth \$41,000 to the winner. The Futurity was for 2-year-olds, and was won by Proctor Knott, owned by Bryant & Scroggins, of Kentucky. This horse won the largest stakes of that season, the sum reaching \$69,780, which is the largest amount ever won by a 2-year-old in a season.

#### Snow Flakes.

The lightness of snow flakes is the result of their surface being so great when compared with their volume, and is accounted for in some degree by the large quantity of air amid their frozen particles. Snow flakes contain about nine times as many volumes of air, entangled, so to speak, among their crystals, as they contain water. Very fine and lightly deposited snow occupies about twenty-four times as much space as water, and is from ten to twelve times lighter than an equal bulk of that fluid.

#### A Big Valley.

The valley of the Amazon is larger than that of the Mississippi, the former river draining 2,330,000 square miles and the latter 1,244,600 square miles. The Amazon drains a greater area than any other river on the globe.

#### United States Population.

The present estimated population of the United States is 64,000,000. The annual growth by natural increase and immigration is placed at about a million. The estimated foreign population is not far below 14,000,000.

Be not slow in common and usual acts of devotion and quick at singularities; but, having first done what thou art bound to, proceed to the extraordinaries of religion as you see cause. —Jeremy Taylor.



FRED H. NEWMAN. BUSINESS MANAGER.

### Business Notices.

Your Full Address, plainly written, is very essential in order to avoid mistakes.

If You Live near one post-office and get your mail at another, be sure to give the address that we have on our list.

Give a Copy of "Honey as Food and Medicine" to every one who buys a package of honey. It will sell lots of it.

Dr. Miller's Book, "A Year Among the Bees," and the AMERICAN BEE JOUR-NAL for one year-we send both for \$1.50.

If you Lose Money by carelessly enclosing it in a letter, it is without excuse, when a Money Order, which is perfectly safe, costs but 5 cents.

New Subscribers can obtain the full numbers for 1888 and 1889 for \$1.80, if application be made at once, before all the sets of 1888 are gone.

Paper Boxes-to hold a section of honey for retail dealers. We have two sizes on hand to carry sections 41/4 x41/4 and 51/4 x51/4. Price, \$1.00 per 100, or \$8.50 per 1,000.

Preserve Your Papers for future reference. If you have no BINDER we will mail you one for 60 cents; or you can have one FREE, if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

Please write American Bee Journal on the envelope when writing to this office. Several of our letters have already gone to another firm (a commission house), causing vexatious delay and trouble.

Pure Phenol for Foul Brood. Calvert's No. 1 phenol, mentioned in Cheshire's pamphlet on pages 16 and 17, can be procured at this office at 25 cents per ounce. Not being mailable, it must go by express.

In order to pay you for getting new subscribers to send with your renewal, we make you this offer. For each yearly subscriber, with \$1.00, you may order 25 cents worth of any books or supplies that we have for sale—as a premium.

A Home Market for honey can be made by judiciously distributing the pamphlets, "Honey as Food and Medicine." Such will create a demand in any locality at remunerative prices. See list on the second page of this paper

Red Labels for Pails.-We have three sizes of these Labels ranging in size for pails to hold from one to ten pounds of honey. Price, \$1 for a hundred, with the name and address of the bee-keeper printed on them. Smaller quantities at one cent each; but we cannot print the name and address on less than 100. Larger quantities according to size, as follows:

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Samples mailed free, upon application.

Hastings' Perfection Feeder. This excellent Feeder will hold a quart, and the letting down of the feed is regulated by a thumb-screw. The cap screws securely on. It is easy to regulate—either a spoonful or a quart-and that amount can be given in an hour or a day, as desired. By it the food can be given where it is most neededjust over the cluster. Not a drop need be lost, and no robber bees can get at it. A single one can be had for 40 cents, or a dozen for \$3.50, and it can be obtained at this office. Postage 10 cents extra.

International Bee-Convention. The Pamphlet Report of the Columbus, Ohio, Bee-Convention can be obtained at this office, by mail, postpaid, for 25 cents. This pamphlet contains the new bee-songs and words, as well as a portrait of the President. Bound up with the history of the International Society, and a full report of the Detroit, Indianapolis and Chicago conventions, for 50 cents, postpaid.

Aplary Register.—All who intend to be systematic in their work in the apiary, should get a copy of the Apiary Register and begin to use it. The prices are as follows:

Always Mention your Post-Office County and State when writing to this office. No matter where you may happen to be for the hour when actually writingnever mention anything but your permanent address. To do otherwise leads to confusion, unless you desire your address changed. In that case state the old as well as the new address.

Having a Few extra sets of the AMERICAN BEE JOURNAL for the years 1887 and 1888, we will supply both these years, and 1889 and 1890, for \$3.00, until all are sold. Or we will send 1888, 1889 and 1890 for \$2.50, all by mail, postage paid. These are very valuable, and those who have not yet read them should lose no time in securing them.

Yucca Brushes, for removing bees from the combs, are a soft, vegetable fiber, and do not irritate the bees. We supply them at 5 cents each, or 50 cents a dozen; sent by mail, add 1 cent each for postage.

We will Present a Pocket Dictionary for two subscribers with \$2.00. It is always useful to have a dictionary at hand to decide the spelling of words, and their meaning.

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We Club the American Bee Journal for a year, with any of the following papers or books, at the prices quoted in the LAST column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

The American Bee Journal 100	Club
and Gleanings in Bee-Culture2 00 Bee-Keepers' Guide	
Bee-Keepers' Review 1 50 The Apiculturist 1 75	140
Bee-Keepers' Advance1 50 Canadian Bee Journal2 00	1 40
Canadian Honey Producer. A 40	1 30
The 8 above-named papers 565	
and Langstroth Revised (Dadant).3 00 Cook's Manual (old edition) 2 25	2 75
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